PARTS CATALOG

Castle®

2415–UW
Ultrasonic Cleaner

MDT BIOLOGIC COMPANY
1777 East Henrietta Road
P.O. Box 23077
Rochester, New York 14623 U.S.A.

Technology for Life

350594 Rev. A

PARTS CATALOG 350594
Rev A (11/28/95) New Release

Related Publications:

Owner & Operator Manual	350490
Installation Instructions	350534
Service Manual	350593

ORDERING INFORMATION

The replacement parts listed in this catalog may be ordered from your MDT Representative or you may contact:

MDT Technionic Company
1–800–950–9912

NOTE ▶

All parts replaced under warranty shall be returned intact to MDT Biologic Company, 1777 East Henrietta Road P.O. Box 23077, Rochester, NY, U.S.A. 14692.

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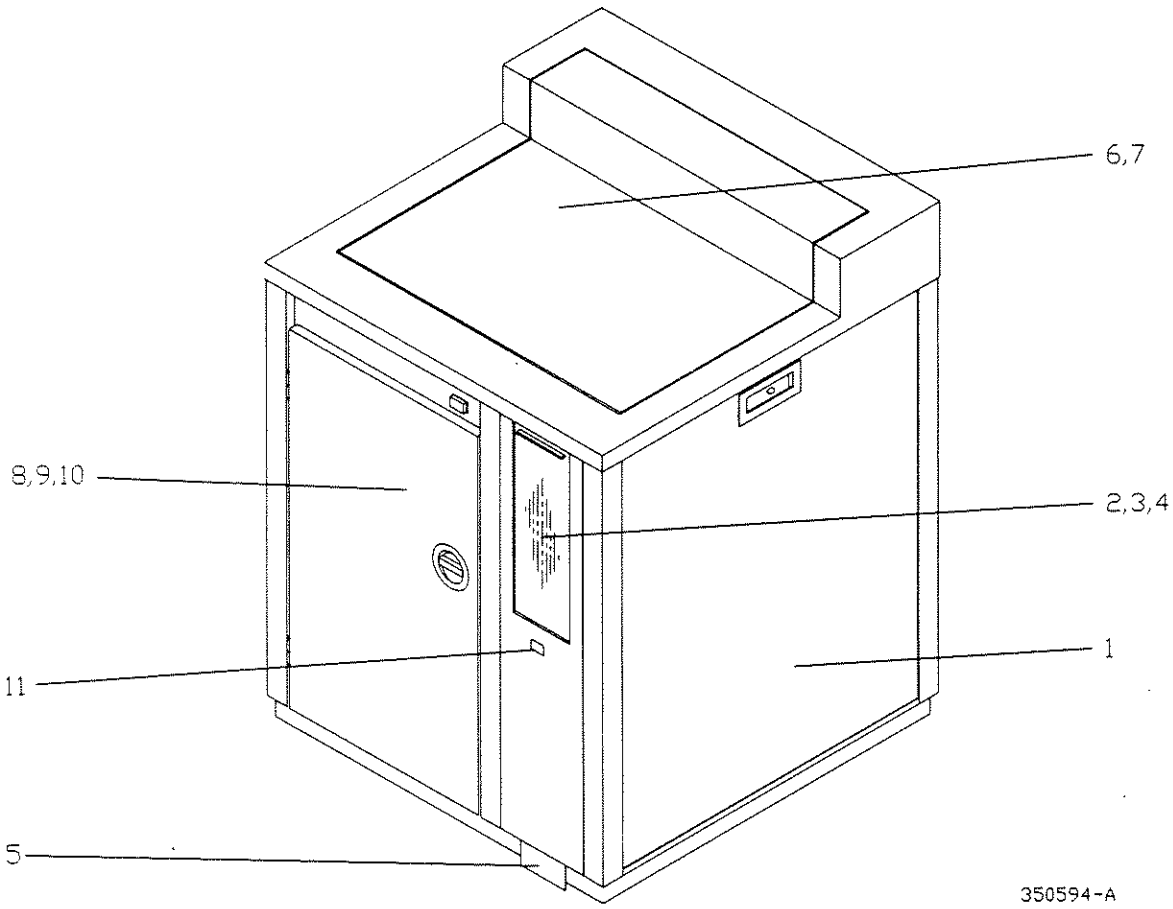

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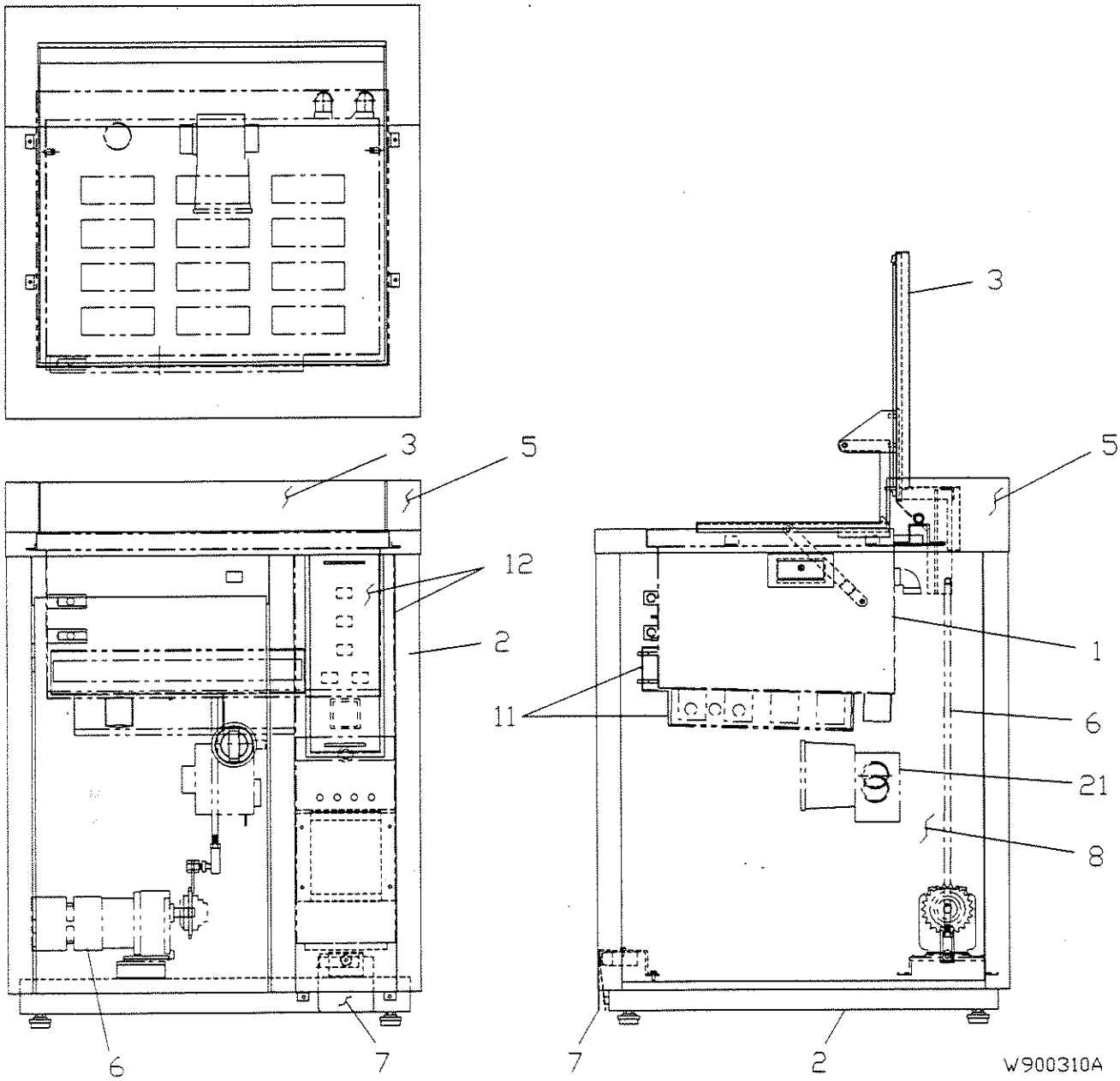

FIGURE 1. ULTRASONIC CLEANER COMPONENTS

Ultrasonic Cleaner Components – Refer to Figure 1

ITEM	PART NO.	DESCRIPTION
1	MY900286	Tank Assembly (with Transducers)
2	MW900274	Frame, Ultrasonic Cleaner
3	MW900294	Lid & Lift Assembly
		See Figure 6 for listing of parts
5	MW9101201	Cover, Ultrasonic Cleaner
6	MW900323	Motor & Drive Arm Assembly
		See Figure 7 for listing of parts
7	MZ910147	Toe Switch Assembly
		See Figure 5 for listing of parts
8	MZ9002951	Panel, Side
10	—	Label Package
		See Figure 11 for listing of parts
11	MZ910132	Transducer Shield Assembly
		See Figure 10 for listing of parts
12	MZ910125	Control Panel Assembly
		See Figure 2 for listing of parts
14	MZ910145	Sonic Generator & Bracket Package
	M2026000	Generator, 120VAC, 500W
	MZ9101451	Plate, Tie
	MZ9101452	Bracket, Base
	E4941	Screw, #10-32 x 3/8 Phillips Pan Head
	E7034	Washer, #10 Helical Spring Lock
18	MZ910143	Utility Panel Package
	MZ9101431	Panel, Utility
	E4941	Screw, #10-32 x 3/8 Phillips Pan Head
	E7034	Washer, #10 Helical Spring Lock
21	MZ910165	Piping Package
		See Figure 8 for listing of parts
31	532123	Electrical Component Package
		See Figure 4 for listing of parts
32	532148	Seismic Anchor Package
	M1010000	Bolt, Seismic Anchor (4-1/2 long)
	E7091	Nut, 1/2-13 Hex
	E7098	Washer, 1/2 Flat
	E2240	Washer, 1/2 Helical Spring Lock
35	MZ9101771	Electrical Control Box Assembly (120VAC)
		See Figure 9 for listing of parts
40	532479	Transformer Package
	532477	Transformer, 3kva
	B0105	Nut, Wire (two #18 AWG min – Two #16 AWG max)
	87326	Connector, Wire

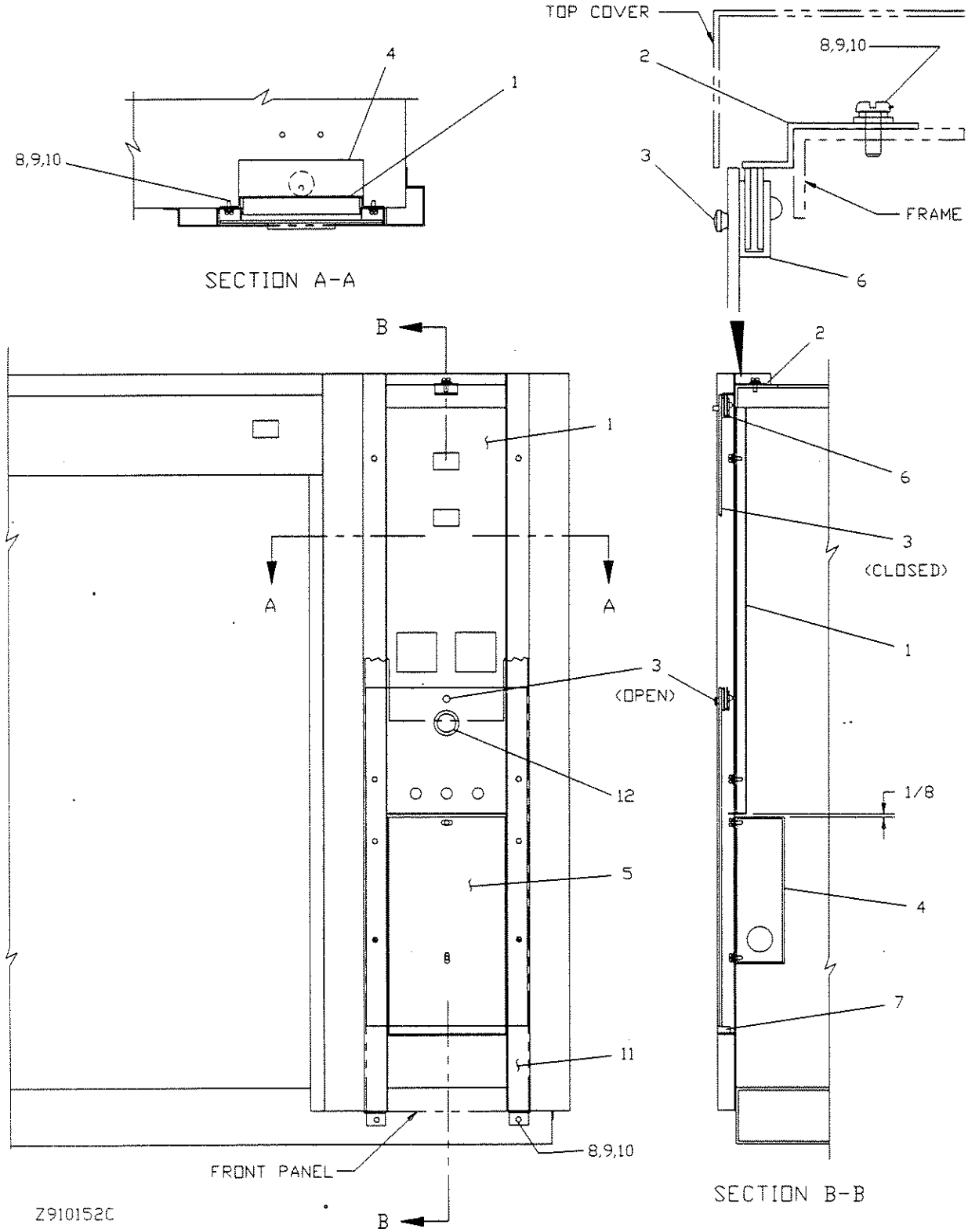

FIGURE 2. CONTROL PANEL ASSEMBLY

Control Panel Assembly – Refer to Figure 2

ITEM	PART NO.	DESCRIPTION
1	MZ9303351	Fuses Panel Assembly See Figure 3 for listing of parts
2	MX900120	Bracket, Latch
3	MZ930036	Window, Control Panel Sliding
4	MZ9101511	Box, Junction
5	MZ9101512	Cover, Junction Box
6	86531	Catch, Magnetic
7	R3892	Gasket, Rubber Seal (specify length)
8	E4941	Screw, #10-32 x 3/8 Phillips Pan Head
9	E7034	Washer, #10 Helical Spring Lock
10	E6481	Washer, 7/32 ID x 1/2 OD x 1/16 thick Flat
11	MZ9101142	Panel, Front (with Trim)
12	MX910096	Dampener, Sound

Fuses Panel Assembly – Refer to Figure 3 [Not Illustrated]

ITEM	PART NO.	DESCRIPTION
1	MZ930335	Panel, Fuses
2	M2002019	Switch, Pushbutton
3	M2002030	Switch, Momentary Pushbutton
4	M2024013	Switch, Power Pushbutton
5	M2024010	Switch, Lid Pushbutton
6	M2024009	Switch, Degas Pushbutton
7	M2024012	Switch, Drain Pushbutton
8	M2024011	Switch, Fill Pushbutton
9	536126	Timer, Eagle Signal
10	M2025004	Socket, 8 Pin
11	M2025007	Alarm, 120V Intermittant
12	M2004004	Holder, Fuse
13	M2003038	Fuse, 3 Amp Fast Blow
14	M2003053	Fuse, 1-3/4 Amp Fast Blow
15	M2003045	Fuse, 10 Amp Fast Blow
16	M2003046	Fuse, 12 Amp Fast Blow
17	532119	Wire Package, Fuses Panel
18	33511	Tie, Cable

Electrical Component Package – Refer to Figure 4 [Not Illustrated]

ITEM	PART NO.	DESCRIPTION
1	M2002002	Switch, Door Interlock
2	M2012007	Sensor, 120°F
3	M2002019	Pushbutton, NO
4	M2024014	Lens, Stop Button
5	M2013003	Block, Terminal
6	532145	Box, Junction (Modified)
7	M2010011	Transformer, 1500VA Isolation
8	M2002001	Switch, Lid Limit
9	M2021140	Connector, 3/4 Romex
10	M2021125	Connector, 1/2 Strain Relief
11	M2021120	Connector, 1/2 Strain Relief
12	M2021090	Connector, 3/8 Romex
13	M3013007	Tubing, 3/8 Clear Neoprene
14	44482	Pad, Harness Mounting
15	33511	Tie, Cable
16	B0105	Nut, Wire (Two #18 min. – Two #16 max)
17	08172	Nut, Wire (Two #14 min – Two #10 & One #12 max)
18	49833	Fitting, Electrode
19	532124	Wire Package, Electrical Components

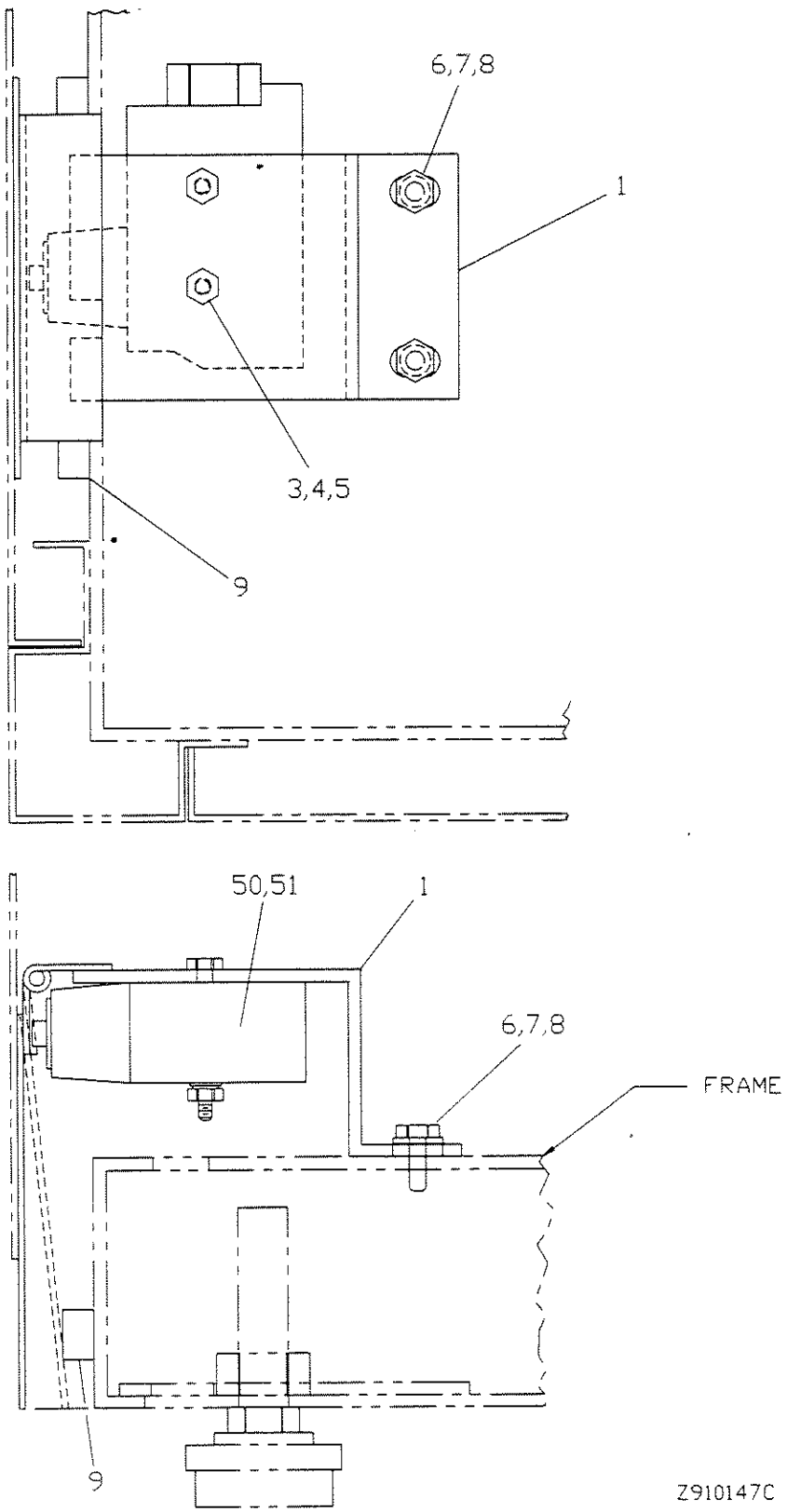

FIGURE 5. TOE SWITCH ASSEMBLY

Toe Switch Assembly – Refer to Figure 5

ITEM	PART NO.	DESCRIPTION
1	532139	Bracket, Toe Switch
3	532064	Screw, #6-32 x 1-1/2 Hex Head
4	E7041	Washer, #6 Helical Spring Lock
5	910242000	Washer, #6 Flat
6	E0108	Screw, 1/4-20 x 5/8 Hex Head
7	E4671	Washer, 1/4 Helical Spring Lock
8	E6478	Washer, 17/64 ID x 5/8 OD x 1/16 thick Flat
9	R3892	Gasket, Rubber Seal (specify length)
50	M2002005	Switch, Toe Micro
51	532129	Wire Package, Toe Switch

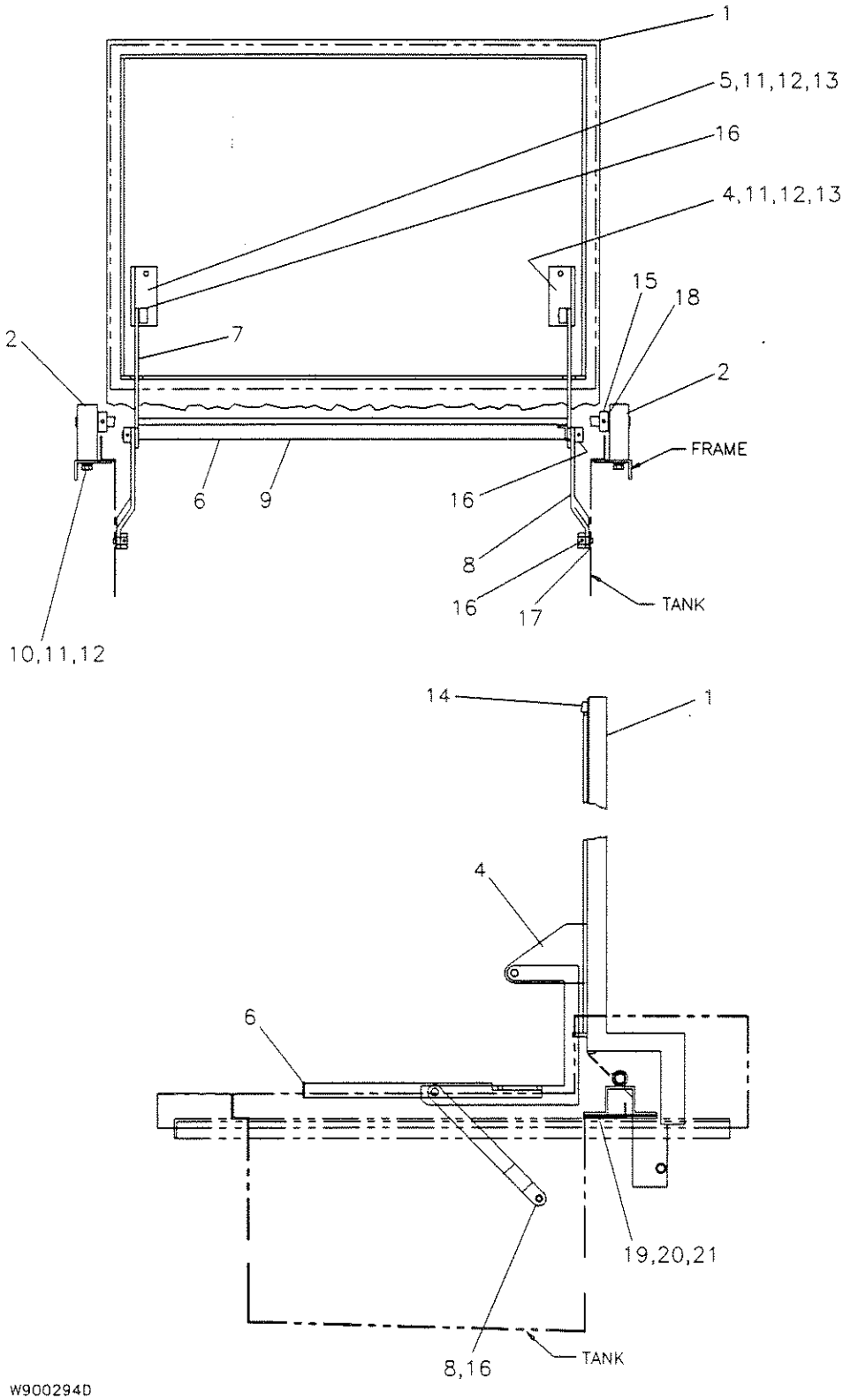

FIGURE 6. LID & LIFT ASSEMBLY

Lid & Lift Assembly – Refer to Figure 6

ITEM	PART NO.	DESCRIPTION
1	MW910078	Lid, Ultrasonic Cleaner
2	MY910274	Block, Lid Bearing
4	MY900258	Bracket, Right Side Lid Lift
5	MY900259	Bracket, Left Side Lid Lift
6	MW9101001	Lift, Front Section
7	MW9100991	Lift, Rear Section
8	MY910119	Arm, Lid Lift
9	MX900110	Rod, Lid Lift
10	532060	Screw, 1/4-20 x 1-1/2 Hex Head
11	E6478	Washer, 17/64 ID x 5/8 OD x 1/16 thick Flat
12	E6471	Washer, 1/4 Helical Spring Lock
13	E7060	Nut, 1/4-20 Acorn
14	R3892	Gasket, Rubber Seal (specify length)
15	66259	Collar, 3/8 ID x 3/4 OD
16	532149	Collar, 1/2 ID x 3/8 long
17	E7100	Washer, 3/8 Flat
18	E7098	Washer, 1/2 Flat
19	MX9101061	Shim, 20 Gauge
20	MX9101062	Shim, 16 Gauge
21	MX9101063	Shim, 12 Gauge

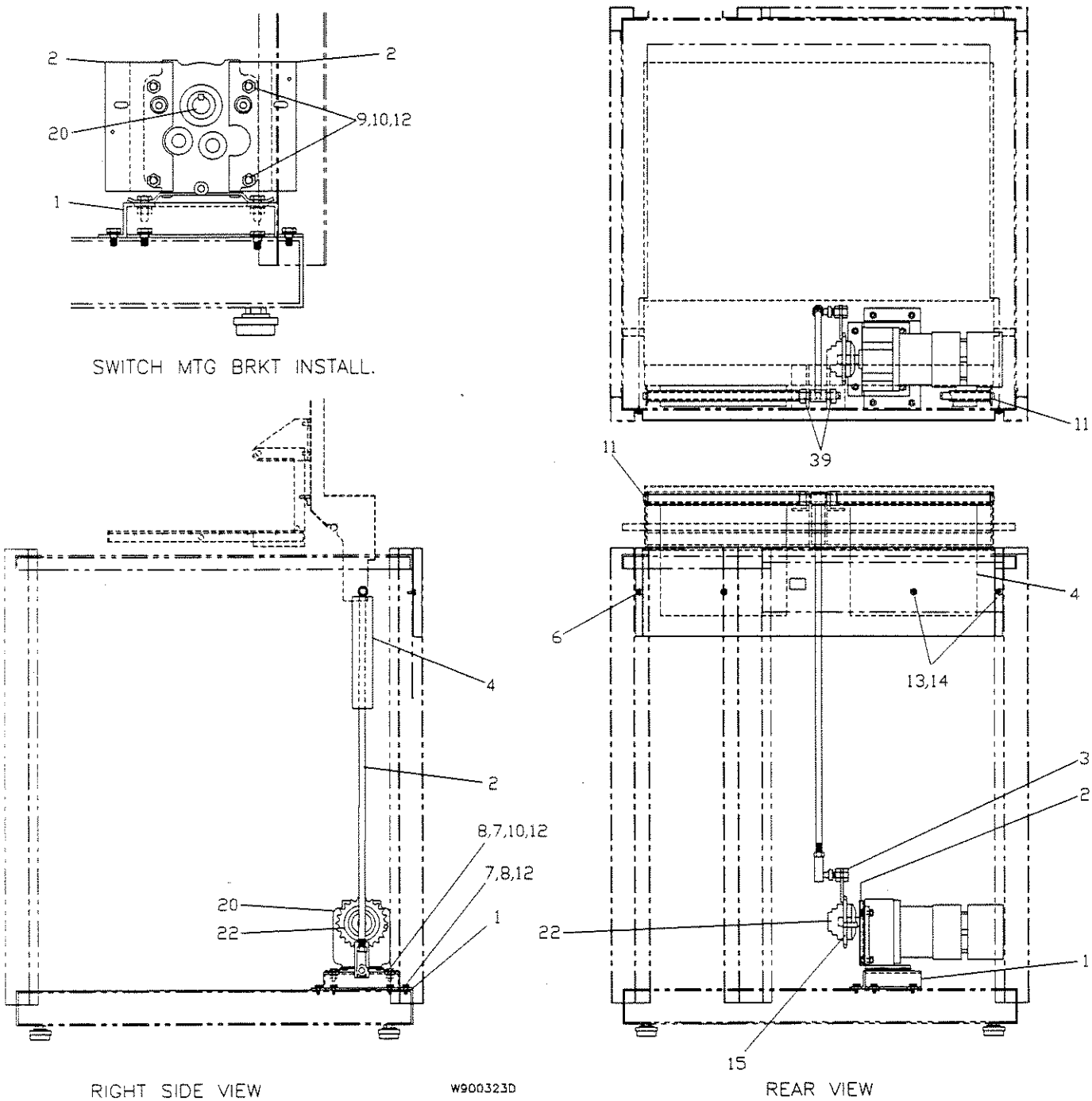

FIGURE 7. MOTOR & DRIVE ARM ASSEMBLY

Motor & Drive Arm Assembly – Refer to Figure 7

ITEM	PART NO.	DESCRIPTION
1	MY900301	Mount, Motor
2	MY910044	Bracket, Switch Mounting
3	MW900314	Arm, Lid Drive
4	MZ9100231	Counterweight, Lid
6	MY910275	Panel, Weight Tie Back
7	E0108	Screw, 1/4-20 x 5/8 Hex Head
8	E6478	Washer, 17/64 ID x 5/8 OD x 1/16 thick Flat
9	E0215	Screw, 1/4-20 x 3/4 Hex Head
10	E2239	Nut, 1/4-20 Hex
11	MX910051	Rod, Counterweight
12	E4671	Washer, 1/4 Helical Spring Lock
13	E4941	Screw, #10-32 x 3/8 Phillips Pan Head
14	16465	Washer, 13/64 ID x 3/8 OD x 1/32 thick Flat
15	M6003004	Bushing
20	M5101005	Gearmotor, 115VAC, 60 Hz
21	M2025008	Brake, Electric (115VAC, 60 Hz)
22	M6003002	Limiter, Gearmotor Torque
39	532149	Collar, 1/2 ID x 3/8 long

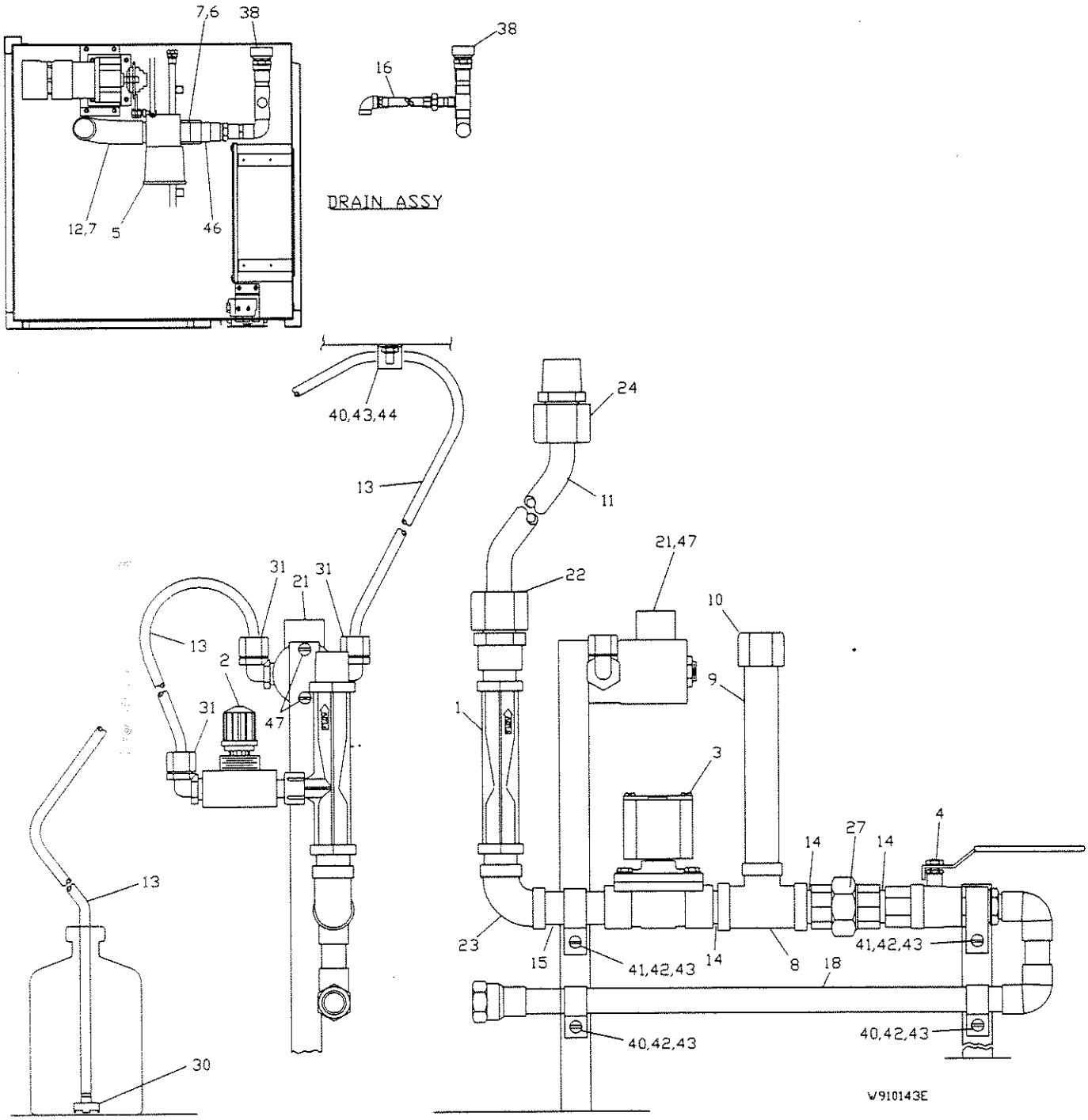

FIGURE 8. PIPING PACKAGE

Piping Package – Refer to Figure 8

ITEM	PART NO.	DESCRIPTION
1	M3023002	Injector, Water
2	M3005021	Valve, Needle (1/4 FPT)
3	M3001036	Valve, Solenoid, (1/2 FPT)
4	58945	Valve, Ball (1/2 FPT)
5	M3002015	Valve, Drain (2")
6	R3893	Hose, 2 ID Radiator (specify length)
7	523388	Clamp, 1-7/16 – 2-1/2 diameter Hose
8	12315	Tee, Female, 1/2 FPT x 1/2 FPT x 1/2 FPT
9	12431	Nipple, 1/2 MPT x 6 long
10	38528	Cap, 1/2 FPT
11	R3891	Tubing, 3/8 ID x 5/8 OD Rubber (specify length)
12	M9000027	Elbow, Rubber Hose
13	R3829	Tubing, 1/4 ID x 3/8 OD Plastic (specify length)
14	12367	Nipple, 1/2 MPT Close
15	12424	Nipple, 1/2 MPT x 2-1/2 long
16	532141	Tube, Drain
18	532140	Tube, Water Service
21	M3001039	Valve, Solenoid (1/4 FPT)
22	M3008029	Connector, Female, 1/2 FPT x 5/8 OD Tubing
23	12242	Elbow, Female, 1/2 FPT x 1/2 FPT
24	M3008026	Connector, Male, 3/4 MPT x 5/8 OD Tubing
27	12286	Union, Female, 1/2 FPT x 1/2 FPT
30	M9000023	Strainer, 1/4 ID Tubing
31	M3008035	Elbow, Male, 1/4 MPT x 1/4 OD Tubing
38	532062	Adapter, 1-1/4 MPT x 1-1/2 PVC
40	70365	Strap, 1/2 diameter Pipe
41	70366	Strap, 3/4 diameter Pipe
42	E4941	Screw, #10-32 x 3/8 Phillips Pan Head
43	E7034	Washer, #10 Helical Spring Lock
44	E7033	Nut, #10-32 Hex
46	MY910282	Adapter, Piping
47	E0176	Screw, #10-32 x 1 Phillips Pan Head

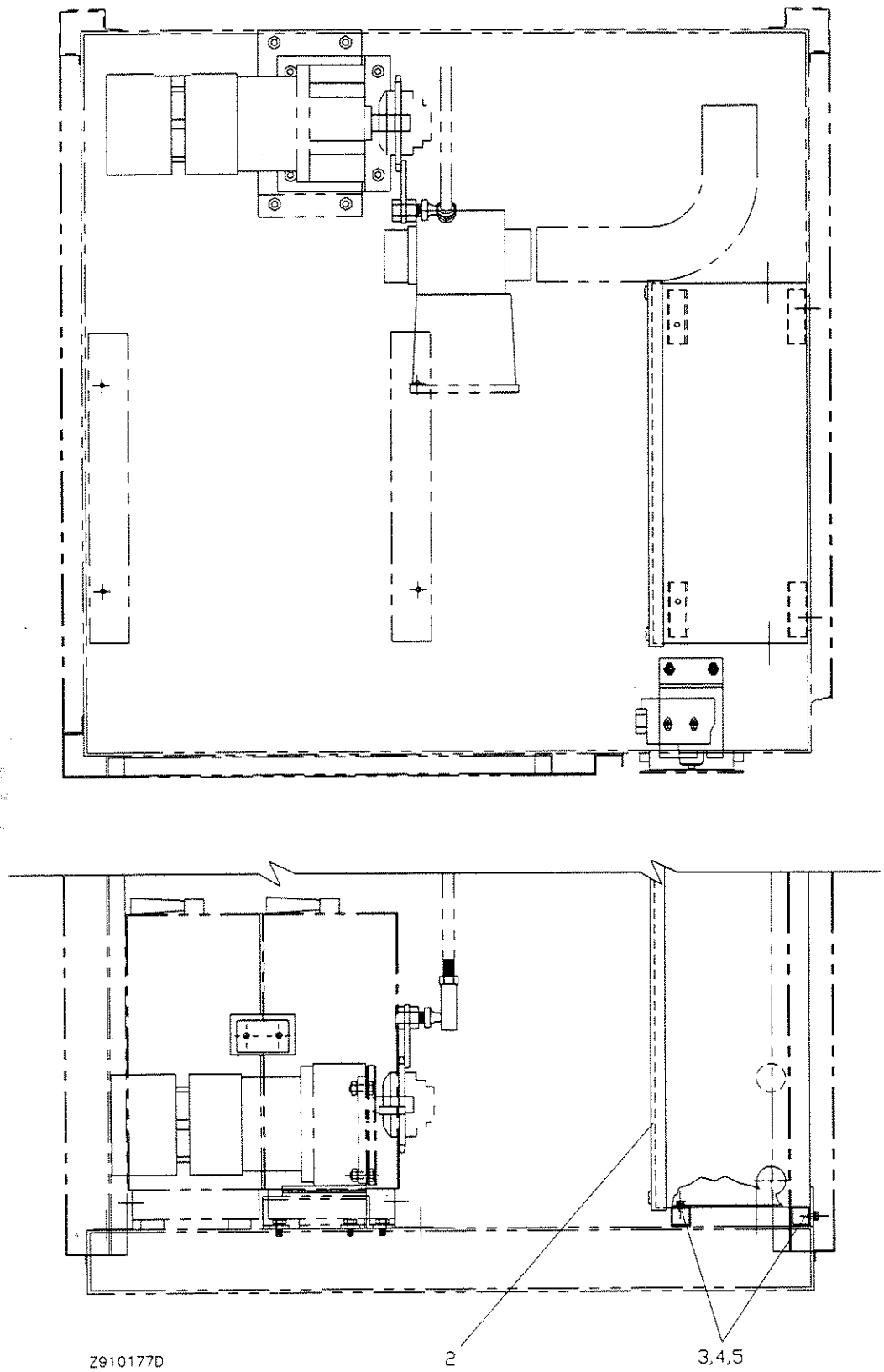

FIGURE 9. ELECTRICAL CONTROL BOX ASSEMBLY

Electrical Control Box Assembly – Refer to Figure 9

ITEM	PART NO.	DESCRIPTION
1	MZ910177	Control Box Assembly
	M2018013	Box, Electrical (16 x 14 x 6)
	E6201	Screw, #10-32 x 3/8 Hex Head
	E7034	Washer, #10 Helical Spring Lock
	16465	Washer, 13/63 ID x 3/8 OD x 1/32 thick Flat
2	532117	Panel, Electrical Box
3	M2006005	Relay, 3PDT
4	M2006007	Socket, 11 Pin
5	M2005004	Socket, 8 Pin
6	M2005001	Timer, 180 Second Delay
7	M2013006	Block, Terminal
8	M2013009	Plate, Terminal Block End
9	M2013012	Clamp, Screw-On End
10	M2011001	Control, Dual Function Level
11	M2007003	Contactor, 2 Pole
12	M2013015	Strip, Stacked Terminal
14	M2013016	Plate, Stacket Terminal End
15	532118	Wire Package, Control Box
22	87347	Spacer, 5/32 ID x 1/4 OD x 1 long
23	E4809	Screw, #6-32 x 1-1/4 Phillips Pan Head
24	532109	Label, 1C Heater Contactor
25	532110	Label, 2C Ultrasonic Contactor
26	532111	Label, Level Control
27	532112	Label, 1CR-9CR/1TDR
28	E5013	Screw, #6-32 x 3/8 Phillips Pan Head
29	E7059	Washer, 5/32 ID x 3/8 OD x 3/64 thick Flat
30	532115	Strip, Terminal Jumper (BN46F)
31	532116	Strip, Terminal Jumper (BN36F)
32	532121	Rail, Mounting (13-1/2 long)
33	532122	Rail, Mounting (9 long)
34	M2006008	Clip, Relay Mounting
35	33511	Tie, Cable
36	532125	Label, Terminal Block Marker (#11–#62)
37	532126	Label, Terminal Block Marker (N)
38	532127	Label, Terminal Block Marker (#64–#65–G)
39	532128	Label, Terminal Block Marker (G–#64–#65)
81	M2021140	Connector, 3/4 Romex
90	M2021090	Connector, 3/8 Romex
91	E4941	Screw, #10-32 x 3/8 Phillips Pan Head

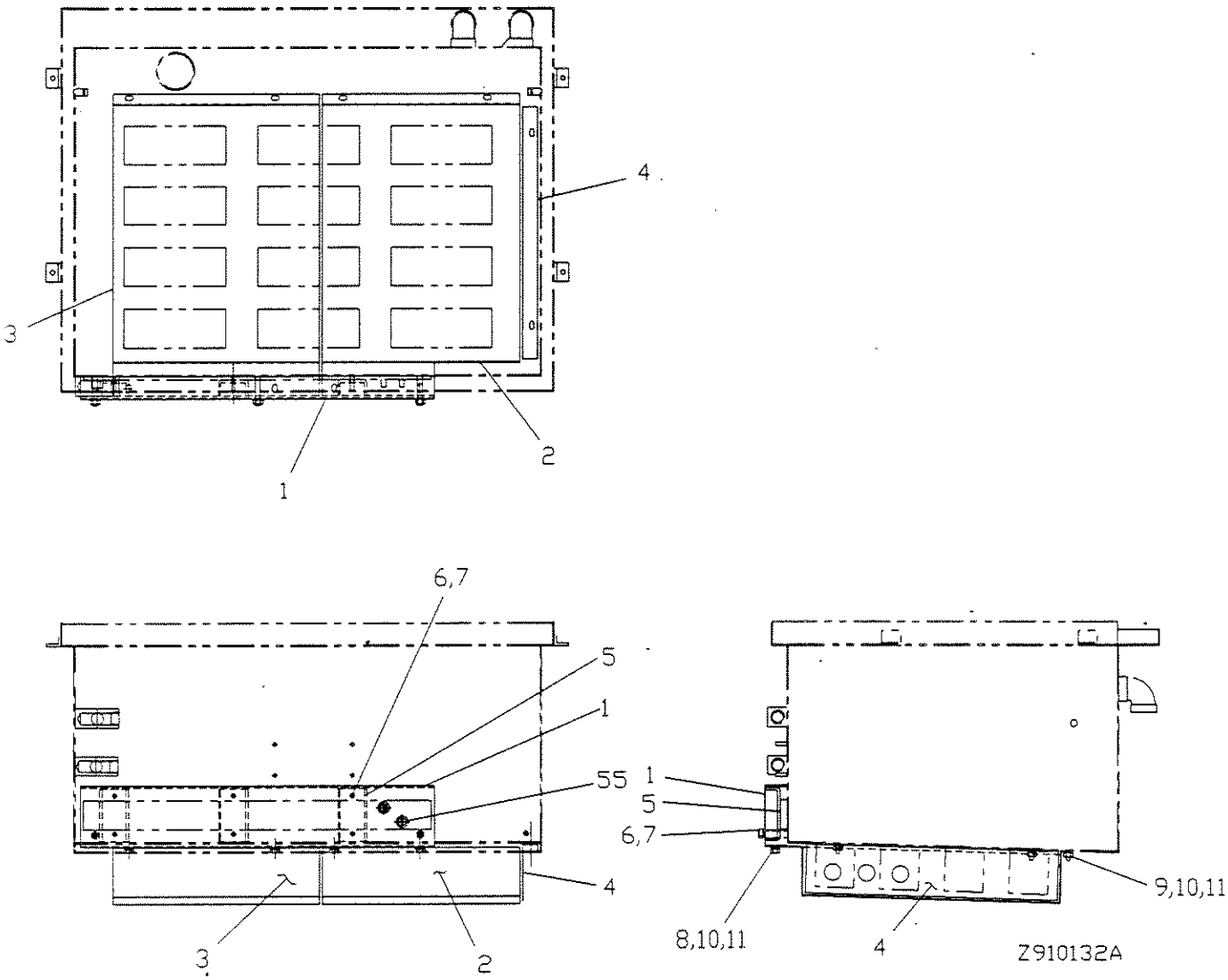

FIGURE 10. TRANSDUCER SHIELD ASSEMBLY

Transducer Shield Assembly – Refer to Figure 10

ITEM	PART NO.	DESCRIPTION
1	MY900285	Shield, Strip Heater
2	MZ9101311	Shield, Right Transducer Bottom
3	MZ9101312	Shield, Left Transducer Bottom
4	MZ9101313	Shield, Transducer Side
5	MY910171	Bracket, Strip Heater
6	E2239	Nut, 1/4-20 Hex
7	E4671	Washer, 1/4 Helical Spring Lock
8	E4941	Screw, #10-32 x 3/8 Phillips Pan Head
9	E7033	Nut, #10-32 Hex
10	E7034	Washer, #10 Helical Spring Lock
11	16465	Washer, 13/64 ID x 3/8 OD x 1/32 thick Flat
55	M2030016	Heater Strip, 120VAC, 1000 Watt

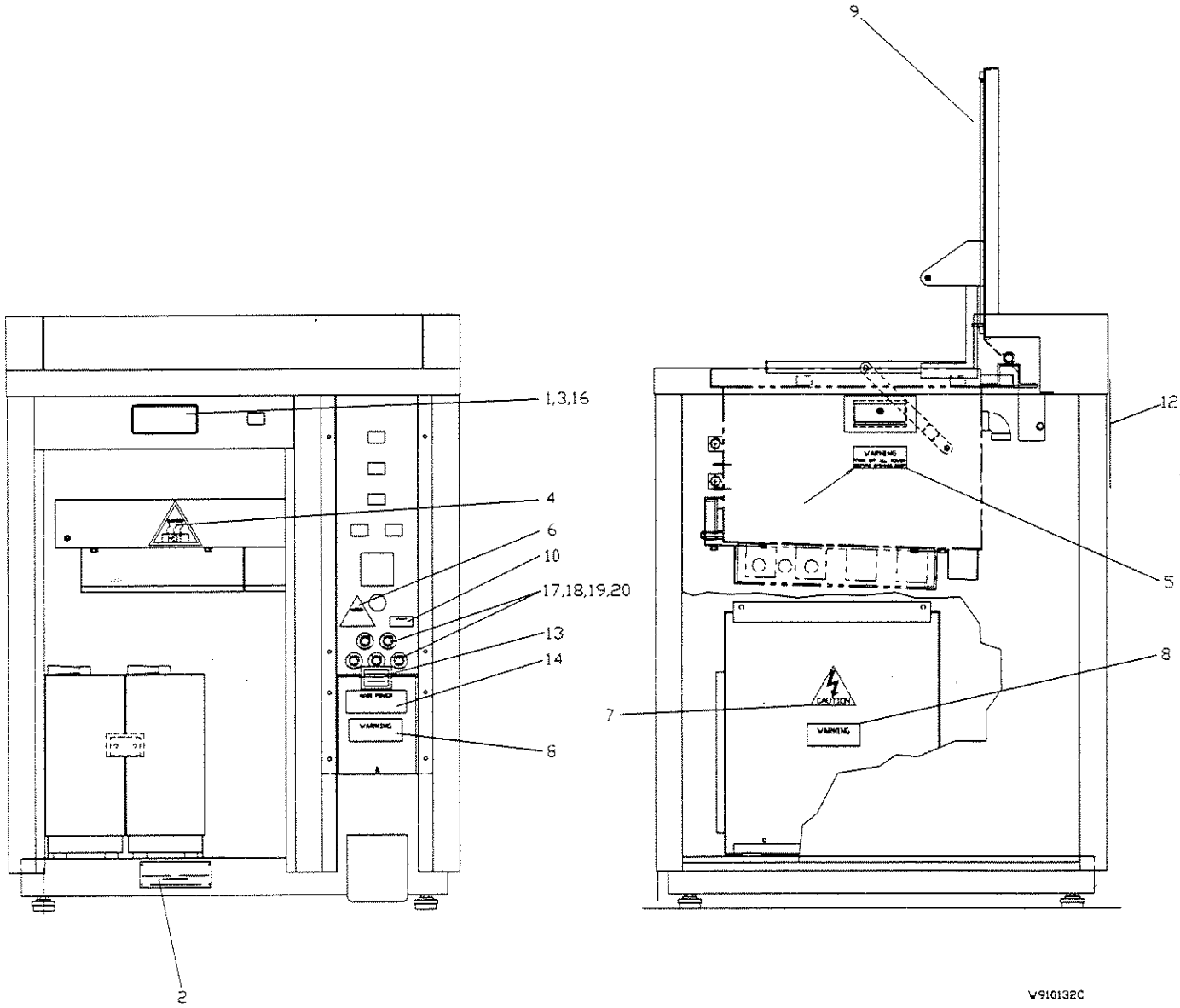

FIGURE 11. LABEL PACKAGE

Label Package – Refer to Figure 11

ITEM	PART NO.	DESCRIPTION
1	513603	Decal, MDT
2	—	Plate, Rating
3	M2019038	Label, Castle Ultrasonic Cleaner
4	MX9100612	Label, Hot Surface Caution
5	MX910062	Label, Turn Off Power Warning
6	MX9100631	Label, Replace 2.5 Amp Fuse Warning
7	MX910064	Label, Shock Hazard Caution
8	MX910065	Label, Turn Off Power Warning
9	MX910066	Label, Automatic Lid Warning
10	MX910098	Label, Risk of Fire Warning
12	MX910169	Label, Remove Counterweight Screw Caution
13	MX910161	Label, Fuse Location
14	MX910167	Label, Main Power Location
16	519501	Bezel, Nameplate
17	MY9303761	Label, Fuse (1F)
18	MY9303763	Label, Fuse (2F)
19	MY9303766	Label, Fuse (3F)
20	MY9303767	Label, Fuse (4F)

Recommended Spare Parts

QTY.	PART NO.	DESCRIPTION
2	M2003053	Fuse, 1-3/4 Amp Fast Blow
2	M2003038	Fuse, 3 Amp Fast Blow
2	M2003045	Fuse, 10 Amp Fast Blow
2	M2003046	Fuse, 12 Amp Fast Blow
1	M2030016	Heater Strip, 120VAC, 1000 Watt
1	M2006005	Relay, 3PDT
2	M9000023	Strainer, Detergent
1	536126	Timer, Eagle Signal
1	M2005001	Timer, 180 Second Delay
1	M3001039	Valve, Detergent Supply Solenoid (1/4 FPT)
1	M3001036	Valve, Water Supply Solenoid (1/2 FPT)

Technology for Life

MDT Biologic Company

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